

FIGURE 1

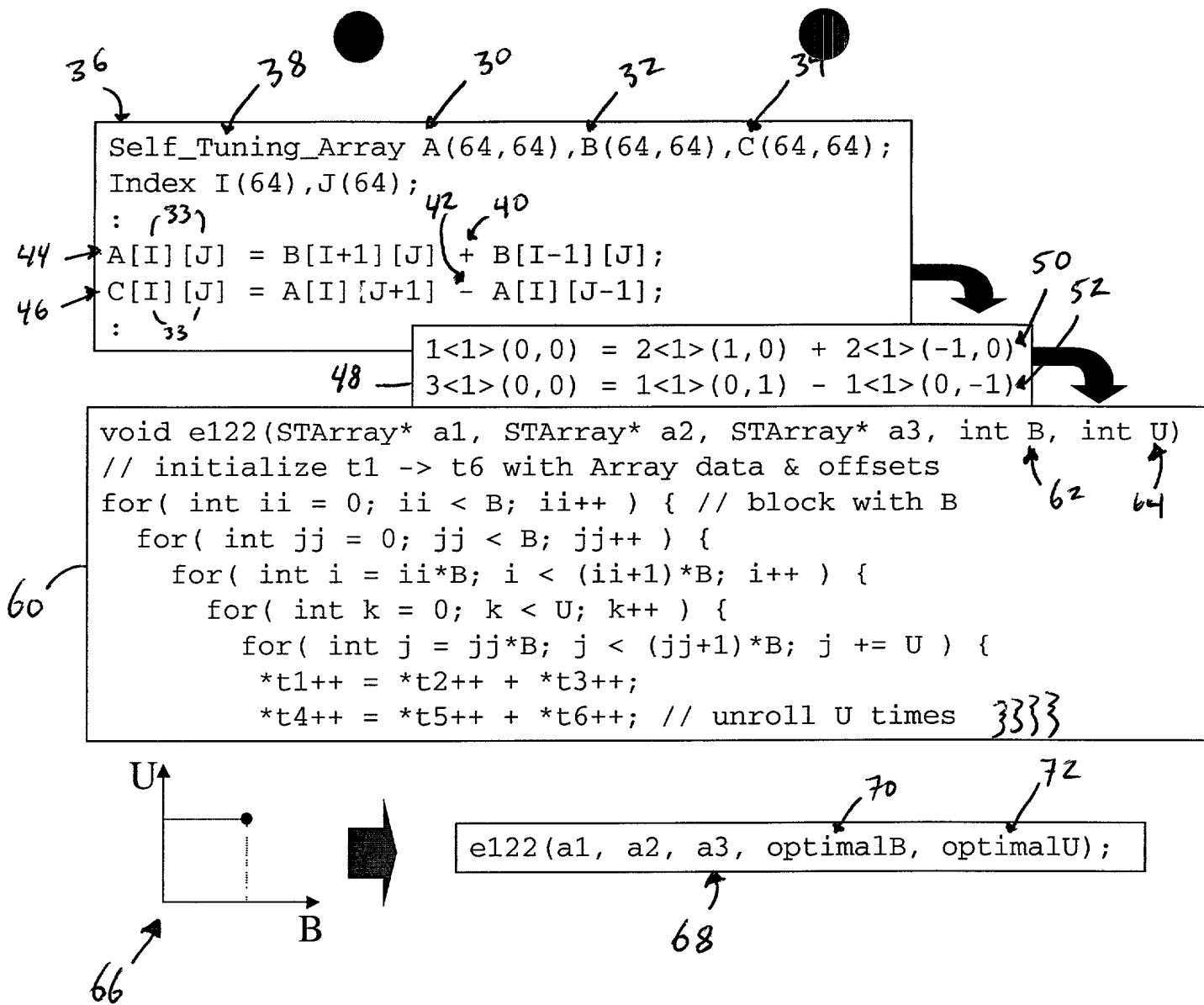


FIGURE 2

FIG. 3 is a block diagram of a system for processing data in accordance with the present invention. The system includes a data source 100, a processor 102, and a data sink 104. The data source 100 provides data to the processor 102, which then outputs the data to the data sink 104. The processor 102 is configured to process the data in accordance with the present invention.

User Code 100

104 {  

$$\begin{aligned} A[I][J] &= B[I+1][J] + B[I-1][J]; \\ C[I][J] &= A[I][J+1] - A[I][J-1]; \\ D[I][J] &= C[I+1][J] + C[I-1][J]; \\ E[I][J] &= D[I][J+1] - D[I][J-1]; \end{aligned}$$
  
 }  
 109 {  

$$\begin{aligned} A[I][J] &= B[I][J] + D[I][J]; \\ C[I][J] &= B[I][J] - D[I][J]; \end{aligned}$$
  
 }  
 113 {  

$$\begin{aligned} A[I][J] &= C[I-1][J] + B[I-1][J+1]; \\ B[I][J] &= C[I][J+1] - B[I][J+1]; \end{aligned}$$
  
 }

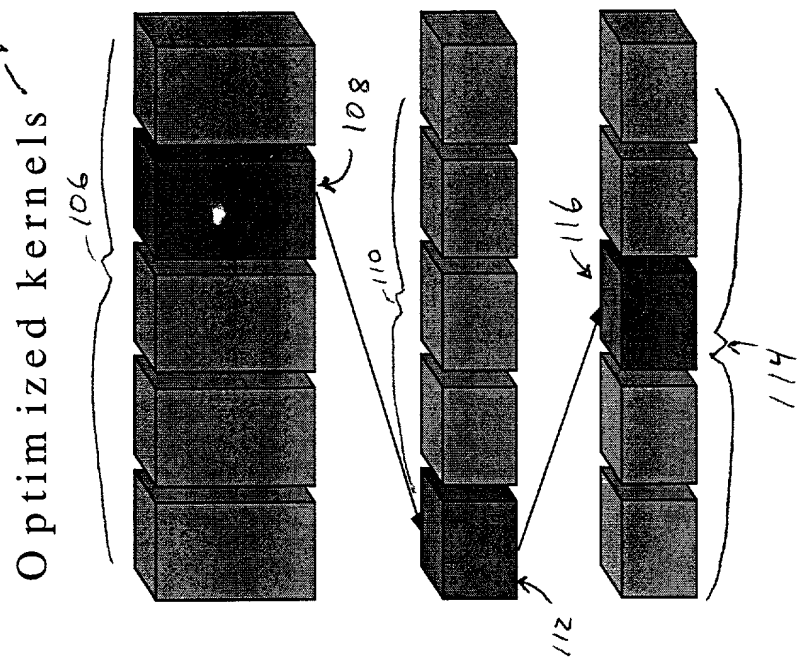


FIGURE 3